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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Lennart Angquist

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EXAMINER

LAXTON, GARY L

ART UNIT

PAPER NUMBER

2838

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/533,874	ANGQUIST, LENNART	
	Examiner	Art Unit	
	Gary L. Laxton	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/5/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. Claims 3, 7, 8, 11 and 13-24 are objected to because of the following informalities:

Claim 3 recites the limitation "means" in line 3. There is insufficient antecedent basis for this limitation in the claim. Is this the same "means" recited in claim 1?

Claim 7 recites the limitation "capacitively coupled" in line 5. There is insufficient antecedent basis for this limitation in the claim. Is this the same coupling in claim 1 line 5?

Claim 7 recites the limitation "the junction" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "capacitively coupled" in line 6. There is insufficient antecedent basis for this limitation in the claim. Is this the same coupling in claim 1 line 5?

Claim 8 recites the limitation "the junctions" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "a conductor" in line 3. There is insufficient antecedent basis for this limitation in the claim. Is this the same from claim 9 line 4?

Claim 11 recites the limitation "capacitively coupled" in line 4. There is insufficient antecedent basis for this limitation in the claim. Is this the same coupling in claim 1 line 5?

Claim 11 recites the limitation "the junctions" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "generating power at ground potential" in line 3. Does the applicant mean generating power at zero potential (i.e. ground)? How does power get generated at ground? Isn't ground at zero potential? Does the applicant mean generating power referenced to ground? Claims 14-24 inherit the same from claim 13.

Claim 13 recites the limitation "the auxiliary power" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "a reactive compensation means" in line 2. There is insufficient antecedent basis for this limitation in the claim. Is this the same from claim 13?

Claim 15 recites the limitation "a high frequency voltage power" in line 2. There is insufficient antecedent basis for this limitation in the claim. Is this the same from claim 13?

Claim 17 recites the limitation "a capacitive coupling" in line 4. There is insufficient antecedent basis for this limitation in the claim. Is this the same from claim 13?

Claim 18 recites the limitation "a reactive compensation means" in line 4. There is insufficient antecedent basis for this limitation in the claim. Is this the same from claim 13?

Claim 19 recites the limitation "a capacitive coupling" in line 2. There is insufficient antecedent basis for this limitation in the claim. Is this the same from claim 13?

Claim 19 recites the limitation "capacitively coupling" in line 5. There is insufficient antecedent basis for this limitation in the claim. Which coupling is this?

Claim 20 recites the limitation "a capacitive coupling" in line 3. There is insufficient antecedent basis for this limitation in the claim. Is this the same from claim 13?

Claim 20 recites the limitation "capacitively coupling" in line 5. There is insufficient antecedent basis for this limitation in the claim. Which coupling is this?

Claim 23 recites the limitation "a capacitive coupling" in line 2. There is insufficient antecedent basis for this limitation in the claim. Is this the same from claim 13?

Claim 23 recites the limitation "capacitively coupling" in line 4. There is insufficient antecedent basis for this limitation in the claim. Which coupling is this?

Claim 24 recites the limitation "a capacitive coupling" in line 2. There is insufficient antecedent basis for this limitation in the claim. Is this the same from claim 13?

Claim 24 recites the limitation "the step of inductively couple" [sic] in line 4. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 21 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 is in improper form because the dependency is indefinite. Accordingly, the claim has not been further treated on the merits. Claim 23 inherits the same.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6, 9, 13-16, 18, 21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al (US 5,757,099).

Cheng et al discloses a power source (e.g. 41), a load circuit (e.g. 32), and a transmission link (e.g. 30, 31) for coupling the power source to the load circuit, wherein the power source comprises a high frequency voltage generator (e.g. 40), the transmission link comprises a first and a second current path (e.g. 36, 38, 42), each path being closed by capacitive coupling (e.g. 36) to provide insulation between the ground potential and the high potential, and each current path having a reactive compensation means (42) for series compensation of reactive power generated by the capacitive coupling.

However, Cheng et al do not disclose that the power supply is a power supply equipment for a high voltage installation.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the power supply apparatus of Cheng et al as power supply

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equipment for a high voltage installation in order to provide a power supply which compensates reactive power as taught by Cheng et al.

7. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al in view of Peng et al (US 6,370,050).

Cheng et al disclose the claimed subject matter in regards to claim 1 except for the capacitive coupling is provided by a stray capacitance.

Peng et al teach relying on stray capacitance in lieu of discrete capacitors and/or inductors.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cheng et al to provide the capacitive coupling by a stray capacitance as taught by Peng et al in order to reduce manufacturing cost by reducing the discrete component count.

8. Claims 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al and Peng et al in view of Hwang et al (US 5,396,165).

Cheng et al disclose the claimed subject matter in regards to claims 1 and 13 supra, except for the wherein the voltage generator is capacitively coupled.

Hwang et al, figure 5, teaches isolating circuit subsystems through the use of coupling capacitors.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cheng et al and Peng et al to capacitively couple the voltage generator as taught by Peng et al to protect the generator through isolation from the capacitors.

9. Claims 8, 10, 11, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al in view of Hwang et al (US 5,396,165).

Claims 8, 10, and 20; Cheng et al disclose the claimed subject matter in regards to claims 1 and 13 supra, except for the wherein the load circuit is capacitively coupled and wherein the voltage generator is capacitively coupled.

Hwang et al, figure 5, teaches isolating circuit subsystems through the use of coupling capacitors.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cheng et al to capacitively couple the voltage generator or the load circuit as taught by Peng et al to protect the circuits through isolation from the capacitors.

Claims 10 and 22; Cheng et al discloses how the inductors are coupled to each other through (42).

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al in view of Bjorklund et al (US 5,414,612).

Cheng et al disclose the claimed subject matter in regards to claim 1 except for wherein the load circuit is comprises a transformer with the secondary winding coupled to an AC/DC converter.

Bors teaches a load circuit having a transformer (106) with a second winding coupled to an AC/DC converter (108) to provide DC power to a DC load from an AC source.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cheng et al to include a load circuit with a transformer having the secondary coupled to an AC/DC converter as taught by Bors to provide DC power to a DC load from an AC source.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,414,612 Bjorklund et al disclose a HVDC transmission system with coupled inductors.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gary L. Laxton
Primary Examiner
Art Unit 2838

7/17/2006